

CLAIMS

1. A positioning system comprising a fixed base unit,
at least one mobile unit and a data recorder, wherein the
base unit and the or each mobile unit include a GPS
receiver and wherein the or each mobile unit is arranged
to record its position indicated by its GPS receiver and
the data recorder is arranged to compare the recorded
position of the mobile unit with the position recorded
simultaneously by the fixed base unit from its GPS
receiver to establish the position of the mobile unit
relative to the base unit.
2. A system as claimed in claim 1 comprising a vehicle
position identifying system wherein the mobile unit is
provided in a vehicle and is arranged to transmit its
instantaneous GPS identified position to the data
recorder together with identification information
identifying the vehicle or mobile unit.
3. A system as claimed in claim 2 wherein the mobile
unit includes a processor connectable to a GPS receiver
and a vehicle transmitter.
4. A vehicle as claimed in claim 3 in which the
processor is further connectable to one or more of a
computer terminal, a keyboard, a remote display, a CRT,
a magnetic stripe reader, a vehicle monitoring system, a
printer, a finger print imager, a radio frequency
identification tag, a radio frequency wide area network,
a satellite network, a collision avoidance system, a
automatic weighing system or a remote memory store.
5. A system as claimed in claim 3 further comprising a

portable terminal, the portable terminal being connectable to the processor and including a bar code reader for inputting identification information to the processor.

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6. A system as claimed in claim 3 wherein the processor is connectable to one or more information input or output devices all of which are serial connected and arranged to receive power from the vehicle.

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7. A system as claimed in claim 1 comprising a stored item position identifying system wherein the or each mobile unit is arranged to record identification information for identifying an item simultaneously with its GPS identified position.

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8. A system as claimed in claim 7 in which the or each mobile unit comprises a bar code reader for reading a bar code symbol on an item to record identification information.

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9. A system as claimed in claim 7 in which the or each mobile unit communicates with a base station by radio communication.

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10. A system as claimed in claim 7 in which the mobile units and the base station comprise a local area network communicating by wireless communication.

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11. A system as claimed in claim 7 in which the or each mobile unit includes a data memory for storing a GPS identified position, item identification and time of reading information, and is arranged to download the information to the data recorder at a later stage.

13. A method of identifying the location of one or more mobile units relative to a fixed base unit wherein the or each mobile unit and the base unit are each equipped with a GPS receiver and wherein the mobile unit and base unit simultaneously record their GPS identified position and a data recorder records the position of the or each mobile unit relative to the base unit.

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